ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS
FOUNDED 1886

the ILLINOIS ENGINEER

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
FOUNDED 1934

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THE
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NATIONAL CHAPTER EVALUATION COMPETITION ANNOUNCED

Administrative Procedures

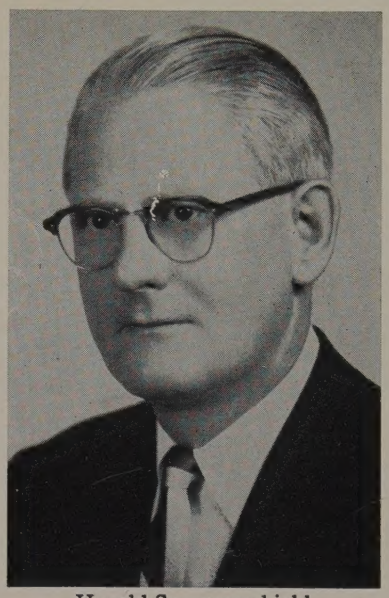
1. For the purpose of the national competition, three levels of competition based on chapter membership size have been established, as follows:
   A. Chapter size under 100 members.
   B. Chapter size 100-300 members.
   C. Chapter size over 300 members.
2. Two sets of the CHAPTER EVALUATION PROGRAM will be forwarded to each chapter president by the national headquarters. One set is to be retained by the chapter president as a master set for submittal in the competition and/or as a check list of committee progress on their assignments.
3. Where a chapter desires to participate in the competition, the master set should be filled out as completely as the circumstances warrant and forwarded to state society headquarters for evaluation. In submitting its material the chapter should indicate at what level it is competing. The **deadline date for forwarding this material to the state is June 1, 1962.**
4. Where a state society has an established program of chapter evaluation, its program may be substituted for the Chapter Evaluation Program **but in order to be equitable in the final judging it will be necessary that the state program be transcribed into the format and content of the Chaper Evaluation Program.** Thus, afer a state has determined the winner of its evaluation program, the accomplishments of the winning chapter(s) should be transferred to the Chapter Evaluation Program. This then becomes the "Chapter Master Set" to be submitted in accordance with item 6, below.
5. Each **state** is limited to **one nominee** at **each** of the **three levels** of competition. A **state** may compete in **any one, or all,** of the **three levels.**
6. **Chapter nominees** should be forwarded by **July 15, 1962,** to the State and Chapter Activities Committee at the national headquarters office. The file for each nominee should contain the following:
   1. Chapter Master Set of CHAPTER EVALUATION PROGRAM.*
   2. Any additional documentary evidence of chapter accomplishment.

   * See Item 4 above.
7. The State and Chapter Activities Committee will announce the winners at each of the three levels of competition on or about **September 1, 1962.**
8. The president, or representative, of the winning chapter at each level of competition will be invited to the Fall Professional Meeting of NSPE at Society expense. **Phoenix, Arizona** is the site for this meeting—November 1-3, 1962.

PRESIDENT'S COLUMN

"For unto you is born this day in the City of David a Saviour which is Christ the Lord." LUKE 2:11

This is the most significant prophetic statement ever made. As we commemorate the birth of Christ the recollection of his teaching is corollary. He taught:



Harold Sommerschield, President

"Love ye one another."
"Do unto others as you would have them do unto you."

It was upon these teachings that our nation was established. They are the initial premises upon which all ethics is based. Today, the basis for ethics has been perverted to: "what we would like the other fellow to do."

As Engineers in private practice we say we believe fundamentally in our free enterprise system. We are loathe to see the prolific development of powerful government bureaus to do engineering works. Yet, we clamor for the opportunity to serve government in the development of projects which compete unfairly with long established private enterprise.

As Engineers in government we say we appreciate the danger of the centralization of power in government. Yet, we cannot see how this can be the case in the extension of our particular bureau. We are sure the consultant is really making a killing from the fees he receives so we require him to do many things which add little or nothing to the excellence of the finished project. Also, we readily accept the benefits of facilities: office, plant and equipment furnished without cost to us by the taxpayer.

As Engineers in industry we say be believe those engaged to design our plants and warehouses should be well qualified registered engineers. We are sure we have the justifiable right to expect the protection of life, health and property and we expect the registered engineer to provide it economically. Yet, we will

(Continued on next page)

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jeopardize these benefits by reserving the right to alter, rehabilitate or maintain our plants utilizing the designs of one who has the gall to claim qualifications without substantiating same through legal registration. We will not hesitate to design products which, if they fail, are a serious danger to the public without aid of competent engineers.

In construction we (the engineer and the builder alike) say we are working for the benefit of our client, the owner. Yet, we neglect to work together with mutual understanding. The builder is sure the sole purpose of every decision rendered by the Engineer is to create hardship for the builder. The engineer is equally sure that every suggestion offered by the builder is simply for personal gain. Unfortunately, in many instances these concepts are true. There is urgent need for both engineer and builder to engender mutual confidence in the conscientiousness and integrity of the other.

As engineers in general we say we must sell our superior way of life to all nations for this is the most effective way to combat other ideologies. Yet, we prostitute the principles we claim to embrace when we enter these countries to do engineering work for them. We contend that our moral standards are not congruous with the standards of other peoples. We contend we must do things as they do them or else we will not be considered for their work. What **are** we trying to sell?

The moral standards we embrace are a vital part of our way of life. How can we ever expect to gain acceptance for our way of life by the nations of the world if we employ double standards?

These things ought not to be! Why do they exist? Could it be that we have lost sight of the premises that established us as a Christian nation? Are we ashamed of our heritage? If not, it is obvious that a return to our basic Christian principles would alter existing trends.

We must re-establish our confidence in the fact that a God honoring people is a blessed people. The history of our country has proved this to be true. The rise and fall of world powers throughout the span of time serves as further verification.

The peoples of other lands are not reluctant to expound their philosophies. Why should we not live our Christian way of life with equal confidence?

As engineers we can exert much influence by changing present trends, which are the product of selfishness and greed, and by reverting to the ethical standards based upon the teachings of the One whose birth we commemorate.

To each and every member of the Illinois Society of Professional Engineers I would like to extend my sincere wishes for a very Merry Christmas and a most Prosperous New Year.

WHERE DID YOU GET THAT CHRISTMAS CUSTOM?

Ever wonder, as you deck the branches of that prize pine or spruce, who trimmed the first Christmas tree? Or when folks first "discovered" the existence of Santa Claus? Or who sang the first Christmas carol . . hung up the first Christmas stockings . . chose a strategic spot for the first holiday mistletoe?

Some Christmas customs are surprisingly recent, while others date back even beyond the earliest Christians. But the Yuletide we know—complete with gifts under the tree, friends calling to admire the decorations, and family reunions—has existed only for the past 200 years, according to Gordon Freund, who buys Christmas decorations and gift items for J. C. Penney Company.

To our ancestors who celebrated "Christmas Messe" (The Mass of Christ) several centuries ago, Christmas was a time of solemn rejoicing and deep religious dedication, with little of the modern gaiety. The new England Puritans actually forbade joyous Yuletide demonstrations!

Follow The New York Dutch

New Englanders and other Americans eventually followed the lead of New York's Dutch settlers and succumbed to the charm of "San Nicolaas"—better known as Saint Nick or Santa Claus. But the jolly gent had a flourishing career long before he reached our shores.

More than 1600 years ago there was a St. Nicholas —a Turkish bishop whose countless works of charity made him a legend in his own lifetime. Martyred in 342 A. D., he became the patron saint of children and of three nations: Greece, Holland and Belgium.

People pictured him on a white horse ascribed to him by old Turkish tradition. But his fame spread to Scandinavia, whose citizens felt more at home with a Saint Nick who rode a reindeer-drawn sleigh. They also gave him his red suit, a hand-me-down from the ancient Norse god, Thor. As for the rosy cheeks, white beard and jolly-jelly belly, they come from the famous poem—"The Night Before Christmas," whose author, Dr. Clement Moore, modeled Santa after an old Dutch gentleman he had once met!

About those Christmas stockings: one legend says that the original St. Nicholas, taking pity on a man too poor to provide a dowry for his daughters, dropped gold pieces into a stocking hung up by the fire to dry. Actually, the custom of hanging up Christmas stockings probably originated in Germany.

What do the world's children find in the stockings or shoes left out for Santa? In Italy, good children find gifts in their shoes, but the naughty ones discover only ashes. The German Santa enters with candy and cookies for the good youngsters, an empty potato sack

(Continued on page 6)

I.S.P.E. CONSTITUTIONAL CHANGES TO APPEAR ON JANUARY BALLOT

In January the corporate members of I.S.P.E. will be requested to express their opinion on the ballot with regard to several Constitutional changes explained herein. These changes have been recommended by the Board of Direction primarily to improve the administrative operation of the Society.

One of the most important recommendations was the establishment of the office of PRESIDENT-ELECT. This would enable automatic succession to the Presidency by the President-Elect and would grant the President-Elect one year to organize his administration for effective work.

ARTICLE II—MEMBERSHIP

Section 5. An Engineer-in-Training Member or a Student Member cannot remain in their respective grade for more than 10 years. This time is exclusive of any time served in the armed forces.

The purpose of the above wording is to place a limitation on the time a "Student Member" can remain in the "Student" category. The time limit on an EIT remains the same, while the category of "Junior Member" is eliminated from definition, as this classification no longer exists. The last sentence is an addition.

ARTICLE VI—ADMINISTRATION

Section 2. The Board shall consist of the President, the President-elect, the three Vice Presidents, the Secretary, the Treasurer, the latest available Past President, the National Directors representing this Society on the NSPE Board of Direction, the Chairman of the Representatives from this Society to the Illinois Engineering Council (so long as such Council exists), and Representatives from each Chapter determined as follows:

Required Number of Corporate Members	Number of Chapter Representatives
UP to 100	1
101 — 300	2
301 — 500	3
501 — 700	4
701 — 900	5
901 — over	6

Establishes President-elect as a Board member, and places a limitation on the number of chapter representatives eventually seated on the ISPE Board of Direction. Regardless of the size of the chapter, when over 900, six representatives will be the maximum allowed.

ARTICLE VII—OFFICERS

Section 1. The officers of the Society shall be the President, the President-elect, the three Vice-Presidents, the Secretary, the Treasurer and together with the National Directors and the Representatives from this Society to the Illinois Engineering Council shall be elected by letter ballot for terms beginning at the close of the annual meeting as follows:

a. The President, the President-elect, and the three Vice-Presidents shall be elected for a term of one year. The President-elect shall assume the office of President at the close of the Annual Meeting at the end of his term as President-elect.

Section 6. Should the office of President become vacant prior to the conclusion of the term for which the President was elected, the President-elect shall assume the office of President immediately, without further action by either the Board of Direction or the membership. Should the President-elect fill the unexpired term of the President under this provision, he shall also fill the office of President for the term for which he himself was elected. All other vacancies in the elected offices, including the National Directors, shall be filled for the unexpired term by appointment by the Board.

The purpose of the above constitutional wordings establishes the offices of ISPE PRESIDENT-ELECT and provides for his succession to the ISPE Presidency should circumstances lead to an untimely vacancy in the office of President.

ISPE'S Executive Director caught some "wheels" in motion at the recent NSPE Roanoke conference. Shown discussing the Seattle convention of NSPE are (left to right) Paul H. Robbins, NSPE Executive Director; Al Morgan, Executive Director of the New York Society of Professional Engineers; Paul Doll, Executive Director of the Missouri Society; Bob Alligood, Executive Director of the Florida Engineering Society. Many of the Executive Directors met in conference during the Roanoke Board Meeting to discuss administrative and organizational problems of their respective societies.

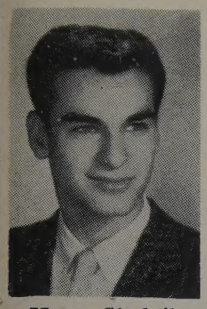
LADIES FARE

St. Clair Auxiliary Honors Past President: (Left) Mrs. Loren "Helen" Krause, 1960 past president, presented a "past-president's pin" to (right) Mrs. Joseph "Katie" Goldenberg, 1961 past president.

The 1962 St. Clair Auxiliary Officers: (Standing left to right) Mrs. Melvin "Helen" Dobbs, Secretary; Mrs. Philip "Bertha" Bauer, Treasurer; Mrs. Eugene "Madelle" Towers, Vice-President. (Seated) Mrs. Manuel "Betty" Garcia, President.

CHICAGO "RECOGNITION DINNER"

The annual Recognition dinner to welcome 99 newly registered professional and structural engineers was a major event on the calendar of the Chicago Chapter.



Harry Skolnik

Director William Sylvester White of the Department of Registration and Education was the speaker and he also presented the certificates to the new engineers at the dinner on Tuesday, December 12, at the Chicago Engineers Club, 314 S. Federal Street.

Another feature of the program was the presentation by Mrs. Samuel O. Fischman of the scholarship award that she has established in her husband's memory. Mr. Fischman graduated from the University of Illinois with a bachelor's degree in mechanical engineering and was keenly interested in fostering excellence in studies within this field. The 1961 Samuel O. Fischman Award was given to Harry Skolnik of Skokie, Ill., a sophomore in mechanical engineering at the Chicago branch of the University of Illinois. Mr. Skolnik's scholastic standing qualified him for the award; he is also president of the student chapter of ASME at Navy Pier. This is the first of five annual awards, consisting of plaques and $100 scholarships to be given to a mechanical engineering student at this school.

At 4:30, the Engineers' Wives held their first get-together, a reception in honor of Mrs. Fischman. The ladies then joined their husbands for the cocktail hour and dinner program.

BEVERLY CHAPTER PROGRAMS FOR CIVIL DEFENSE

The new Beverly Chapter on Chicago's South side has been pointing their fall programs toward various aspects of Civil Defense. Dinner meetings are held on the third Wednesday of each month at the Beverly Woods Restaurant, 11535 South Western Ave., Chicago.

At the October meeting, twenty-five members heard Dr. Steven Kaufmann of Argonna National Laboratories make a very interesting and high level presentation on how the atoms behave and misbehave. The Chapter continued their emphasis on Civil Defense activities at the November meeting and plan to delve into the more practical material on various aspects of CD at their December meeting. On December 20 Mr. Neville Lancaster will present a Lockheed film on "Missiles."

The JANUARY MEETING of the Beverly Chapter will be held at the Beverly Woods on JANUARY 17, 1962; Mr. Richard K. Pulling, P.E. of Lock Joint Pipe Company will present a film and speak on the technical aspects of Prestressed Concrete Cylinder Pipe.

WORLD-FAMOUS FLYER ADDRESSES CAPITAL "RECOGNITION DINNER"

November 21—"Can We Save Our Way of Life and the Capitalistic System" was the topic of Col. Roscoe Turner (second from the right) at Capital's "Recognition Dinner" for newly registered EIT's and PE's. One hundred three Capital Chapter members entertained 46 guests. Shown above with Colonel Turner are from left to right: Manuel Garcia and C. Dale Greffe, ISPE Vice-Presidents, and Charles A. Marr, Capital Chapter Vice-President.

PEORIAREA HONORS NEWLY REGISTERED ENGINEERS, NOVEMBER 16

Front (left to right): Richard H. Burris, Glenn Branstad, Russell Pulst, Edwin Kirk. Back row (left to right): Bill Haynes, Jack Franklin, Marvin Beyers, James Luxner, Philip Webber, William Streight. Bob Newbury, ISPE Executive Director, was the main speaker of the evening.

Christmas Customs (cont'd from p. 2)

for the bad ones. America's "bad 'uns" may discover coal in their stockings, but others find gifts ranging from toy guns to harmonicas.

Evergreen Long Revered A Symbol

No matter how many gifts under the tree, the tree itself is still the center of attraction in most homes—a place of honor which is solidly rooted in history. Thousands of years before Christ's birth, evergreen was revered as a symbol of long life and immortality. German tribesmen brought fir trees into their homes to please the god-like "spirits" they thought to inhabit the trees. When these pagans were converted to Christianity, they transferred their feelings for the evergreen to the new religion.

The first person to *decorate* a Christmas tree may have been Martin Luther. Walking home one night shortly before Christmas, he felt a strong tie between the starry night and the love of God. At home, he placed candles on a little evergreen tree to help his children experience the same wonder of God. The custom grew and spread through Northern Europe, then to America.

The mistletoe has an equally ancient background: primitive Britons called it "all heal" and ascribed to it the magic power to heal disease, neutralize poisons, protect against witchcraft, and bestow fertility on humans and animals. If a young couple sealed their betrothal with a kiss under the mistletoe, they would have good luck for the rest of their lives.

Holly, a Christmas decoration since the middle ages, was also thought to have protective powers; six or seven hundred years ago, young maidens fastened a sprig of holly to their beds at Christmas time to protect them from the "evil one" during the coming year!

Next time you hear "Deck the halls with boughs of holly"—a song which dates back to that remote time—remember the origin of Christmas carols. The word "carol" means to "dance in a ring", and the man who popularized the practice was the beloved St. Francis of Assisi. To bring the Christmas message vividly and directly to his villagers, most of whom could not read, the 13th century saint arranged a manger scene using real people and animals. When the villagers came to see it, St. Francis led them in joyous celebration—in "caroling."

Probably the most recent of the popular Christmas customs is the Christmas card. The first one was sent in 1845 by W. C. Dobson, one of Queen Victoria's favorite painters. Louis Prang of Boston made the first American Christmas cards in 1875, but only during the last 50 years has the practice of sending Yuletide cards become widespread.

THE LEGEND OF THE CHRISTMAS TREE

In homes everywhere at Christmastime the joy and hopes of all the world are still centered in the eternally symbolic tree. The Christmas tree has a place of honor in most homes that is solidly rooted in history, according to Gordon Freund, who buys Christmas decorations and gift items for J. C. Penney Company. Thousands of years before Christ, the evergreen was revered as a symbol of long life and immortality, German tribesmen brought fir trees into their homes to please the god-like "spirits" that were thought to inhabit the trees. Later pagans transferred these feelings to the new Christianity. It's unlikely that the Christmas tree will ever vanish from the Christmas scene.

SODEMANN & ASSOCIATES OPEN WATSEKA OFFICE

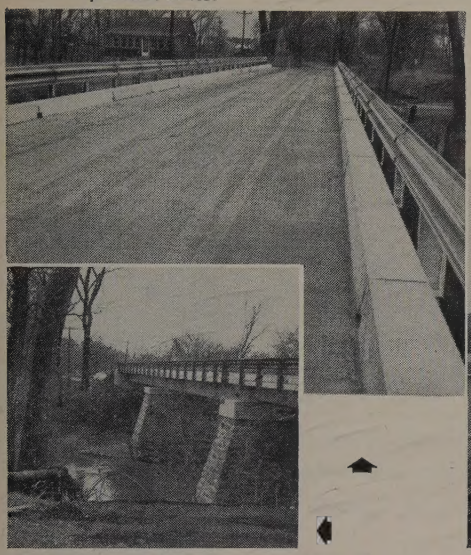
Sodemann and Associates, consulting engineering firm headquartered in Champaign, has purchased the business of Marion L. (Jack) Wills, engineer and land surveyor, and opened a branch office in the Kay Building 102½ South Fourth Street, Watseka.

Wills and his family have moved to Carbondale, where he will operate an office for J. T. Blankinship and Associates, Murphysboro engineering firm.

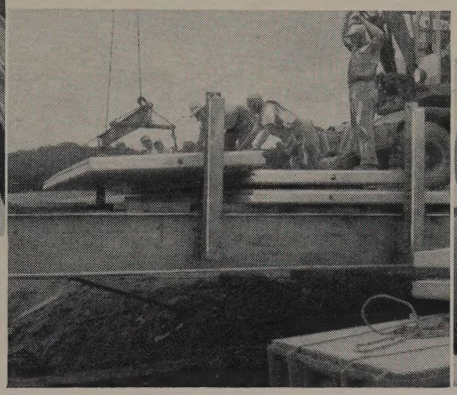
The new branch office of Sodemann and Associates will be managed by Wayne Shoemaker, who has been in charge of the firm's surveying division for more than two years.

HAVE YOU CHECKED NELSEN CONCRETE'S PERFORMANCE/COST RATIO?

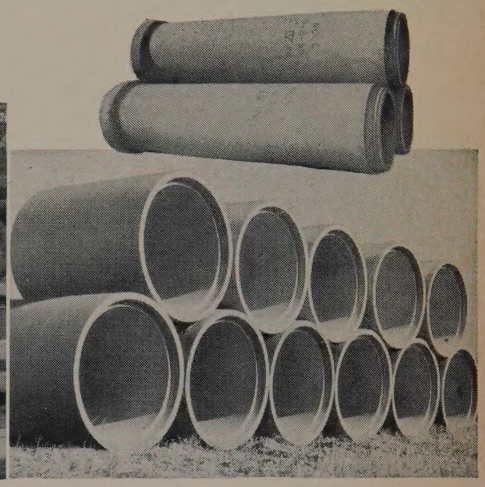
Modular bridge constructed entirely of precast units.



Old bridge with new super-structure of transverse slabs.



New bridge with transverse slabs laid over I-beams.



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Span Lengths . . . 12′ to 40′ in standard precast lengths.

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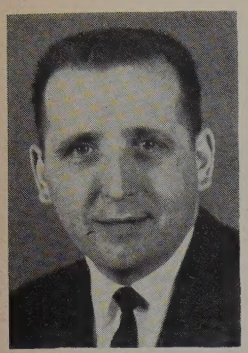


Manuel Garcia

FOR PRESIDENT (1-year term)

MANUEL GARCIA, E. St. Louis, is currently completing his third term as an ISPE Vice-President. Mr. Garcia joined ISPE in 1946 and served as the Secretary Treasurer of the St. Clair Chapter for seven years. He has also been Vice-President and President of the St. Clair Chapter. He served at the state level of ISPE as the Membership Chairman and Chairman of the Ladies Auxiliaries. He is Assistant Chief Engineer of the Alton and Southern Railroad. Mr. Garcia is a graduate of the David Ranken School of Mechanical Trades.

C. Dale Greffe

FOR THE THREE VICE-PRESIDENTS (1-year term)

C. DALE GREFFE, Champaign, is a professor in Mechanical Engineering at the University of Illinois. He holds B.S., M.S., and M.E. degrees. As a member of the Champaign County Chapter since 1950, Mr. Greffe served his constituents as Chapter Secretary-Treasurer and President and as a representative on the Board of Direction for five years. He is currently completing his second term as an ISPE Vice-President. One of his outstanding contributions to the profession of engineering has been his enthusiastic conducting of refresher courses throughout the state of Illinois to encourage registration.

Louis A. Bacon

LOUIS A. BACON, Brookfield, is an Associate Partner and Chief Structural Engineer for Shaw, Metz and Associates, Architects and Engineers, Chicago. He is a graduate of the University of Illinois with a BSCE degree. As a member of the Chicago Chapter, Mr. Bacon served as representative to the ISPE Board of Direction in 1959-60 and is currently completing his first term as ISPE Vice-President. He has done outstanding work for his profession in the field of "Ethics and Practice" at both the chapter and state level of activity.

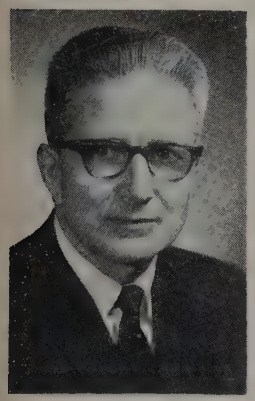
Ralph G. Michael

RALPH G. MICHAEL, Hinsdale, is Vice-President and Chief Engineer for the W-M Corporation, Engineers and Contractors, of Harvey, Ill. Mr. Michael is a graduate of the University of Wisconsin with a BSCE degree. He is currently representing the Salt Creek Chapter on the ISPE Board of Direction and is also the state chairman of the ISPE Education Committee. Mr. Michael became a national member of ISPE in 1956 and was one of the organizers and a charter member of the Salt Creek Chapter. He is also presently chairman of the Salt Creek nominating committee and has also served on its Ethics and Practices and Constitution committees.

Geo. L. Farnsworth, Jr.

FOR SECRETARY (2-year term)

GEORGE L. FARNSWORTH, JR., Bloomington, is a partner in Farnsworth and Wylie. He is a graduate of the University of Illinois with the degrees of BSCE and MSCE. He has been a national member of ISPE since 1951. Last spring he was named ISPE Secretary to fill the unexpired term of John Housiaux, whose work took him to Milwaukee, Wisconsin. This year Mr. Farnsworth also served on the Budget and Finance Committee of ISPE in addition to his regular duties on the Board of Direction and Executive Committee.



Frank Edwards

FOR NATIONAL DIRECTORS (3-year terms)

FRANK W. EDWARDS, Clarendon Hills, winner of the 1956 ILLINOIS AWARD, is currently Vice-President of the Stanley Engineering Co., Chicago. Mr. Edwards graduated from the University of Iowa and holds the degrees of BS, MS and CE. He joined the ISPE as a national member in 1949. His service to the professional society has indeed been exemplary and has earned for him plaudits from the state and national levels. Mr. Edwards served as Chairman of the I.E.C. Representatives in 1951 and 1952; Chicago Chapter Vice-President in 1951 and President in 1952; Chicago Chapter representative in 1955, 1956; ISPE Vice-President in 1957 and State President in 1958. He is currently a National Director and has served in this capacity since 1959. At the national level Mr. Edwards is currently serving as Vice-Chairman of the Functional Section for Consulting Engineers in Private Practice. He is heading the Professional Practices Activities of the Functional Section.

C. E. Missman

CLIFFORD E. MISSMAN, Rock Island, is a partner in the firm of Missman, Stanley, Farmer and Associates. He graduated from the University of Illinois with a BSCE degree. Mr. Missman has been a member of ISPE since 1937 and his record of professional service at all three levels of NSPE is as follows: Vice-President of the West Central Chapter, 1951; Chapter President, 1952; Chapter Representative in 1957 and 1958; Assistant to the ISPE President in 1958. He is currently a National Director, having served in that capacity since 1959.

FOR I.E.C. REPRESENTATIVES (3-year terms, Starting Jan. 1, 1963)

John Dolio

JOHN DOLIO, LaGrange Park, heads the consulting engineering firm of John Dolio & Associates, Chicago. He is a graduate of Chicago Technical College with BSME and BSEE degrees. Mr. Dolio has been a member of ISPE since 1946. His service to the professional society includes Secretary-Treasurer of the Chicago Chapter, 1951; Chicago Chapter Vice-President and President, 1952 and '53, respectively; and four years service (1954-58) as Chapter Representative.

Harry A. Kluge

HARRY A. KLUGE, Collinsville, is County Superintendent of Highways, Madison County, Edwardsville. Mr. Kluge graduated from the Missouri School of Mines and holds the BS degree in Mining Engineering and the degree of Engineer of Mines. He has been a member of ISPE since 1941 and has served the Madison County Chapter as Vice-President in 1946. Last year he served at the state level as Chairman of the ISPE Legislative Committee.

Early construction view of the men's gymnasium, Indiana State Teachers' College, Terre Haute. The folded plate roof of concrete was placed in sections and posttensioned. End diaphragm and bottom flanges of the roof rest on neoprene pads atop a continuous beam.

GYM ROOF OF CONCRETE HAS RECORD SPAN

Scheduled for completion this fall, the men's gymnasium at Indiana State Teachers' College in Terre Haute is attracting special interest because of its long roof span. With a prestressed folded plate concrete roof extending 165 ft. (155 ft. between columns), it is believed to be the longest single span structure of this kind yet built.

The column-free design is of particular advantage for a gymnasium, allowing flexible space for various sports and an unobstructed view for spectators. An area 210 ft. by 155 ft., which will normally be used as three gyms for physical education classes, can be converted into one large room for inter-collegiate basketball games and similar events. Telescopic remote-controlled 30-row bleachers will pull out over two of the gym floors to provide seating for 5,000 people.

An adjoining structure will provide space for three classrooms, fourteen offices, a 72x49-ft. gymnastics floor, a 49-ft. square wrestling and boxing area, and a 75-ft. long Olympic size swimming pool.

In addition to functional advantages, the combination of folded plate design and prestressing is proving economically attractive. Cost of the roof installed is approximately $6.36 per sq. ft.

The folded plate design consists of eight configurations 26 ft. across and 11 ft. 6 in. high, extending crosswise of the building. To get maximum reuse of forms, a 12-in. construction joint was located in each top flange, and the closure strip cast after the adjoining sections were placed on tensioned. The top and bottom flanges are 12 in. thick, while the inclined sections are 6-½ in. thick.

A stiff mix of concrete (2-½ in. maximum slump) was required to provide high quality concrete and to facilitate placement on the 45 deg. slope of the folds. In addition to metal tendons for prestressing, conventional reinforcement was used. The web sections were

(Continued on page 13)

TWO CHICAGO FIRMS AID IN JORDAN IRRIGATION PROJECT

General view of the first stage of the giant East Ghor Valley Irrigation project recently completed in Jordan.

EAST GHOR VALLEY, JORDAN—Two Chicago-based firms have played a leading part in the construction of the East Ghor Canal Project, the first stage of which was recently opened here. The irrigation project, described as the second largest in the middle east, will eventually provide irrigation for 30,000 additional acres of land in this arid nation.

Harza Engineering Company is the consulting engineer for the project which is funded in part by the United States Government. Engineering test equipment used on the project for exploration and soils testing was manufacured by Soiltest, Inc., a subsidiary of Cenco Instruments Corp.

At the official opening of the first stage of the project Oct. 16, Jordan's King Hussein distributed to local farmers, many of them Arab refugees from Palestine, title deeds for a total of 4,000 acres of reclaimed valley land.

The East Ghor Canal project utilizes one of Jordan's principal water resources, the Yarmouk River, which flows from Syria into the Jordan River a few miles south of Lake Tiberias. A portion of the Yarmouk waters are diverted through a one-kilometer tunnel into a 69 kilometer canal which then distributes it through lateral canals to the land along the Jordan River.

It is estimated that the project will provide regular employment to over 2,500 Jordanian farm workers on land that was never before tillable. In addition, the 30,000 acres of reclaimed land will result in approximately $13,160,000 in farm crops annually.

The entire project, scheduled to be completed in 1963, will cost approximately $16 million of which the United States is contributing $7,100,000.

NEW FIRM ANNOUNCED

November 15, Donald R. Booz and Associates, a new firm of consultants to top management, was launched in Chicago.

Thomas J. Roy, P.E.

Concurrently the management consulting concern of James Hynes and Company was merged into the Booz organization, with Hynes becoming a principal of the newly-formed firm. Another principal will be **Thomas J. Roy,** a professional engineer and an experienced management consultant. Mr. Roy is a member of ISPE'S DuKane Chapter.

The new firm, staffed only with senior consultants, plans to counsel clients in solving their own problems, rather than presenting them with completed solutions, Booz explained.

A graduate of Williams College and of Harvard Business School, where he taught for four years, Booz is a former executive of the Jewel Tea Company and has been connected with the consulting firm of Booz, Allen & Hamilton.

Hynes, who holds both bachelor's and law degrees from the University of Michigan, has specialized in business planning and development as an executive of Chrysler Corporation and as a management consultant. Roy has been a management consultant for the past twelve years. Before becoming a consultant, he had fifteen years of management operating experience as a plant production executive.

The new firm has offices at 20 N. Wacker Drive.

Harza Engineer Honored in Jordan

Nick Hernandez (left), design engineer for Harza Engineering Company International, was recently honored by King Hussein of Jordan with a gift of two gold wrist watches, the second watch being for Hernandez's son, born in 1960 in Jordan. Hernandez has completed two years work on the East Ghor Irrigation Project of the East Ghor Canal Authority, and the gift from the King was in recognition of that service. Hernandez is returning to Harza's Chicago office for re-assignment. He is a 1952 graduate of Illinois Institute of Technology.

OCTOBER 26—Bloomington Area Chapter personnel (left) were privileged to hear an outstanding program on "professionalism" delivered by (right) Frederick B. Morse, P.E., National Director of the Indiana Society of Professional Engineers, and a PURDUE faculty member. Mr. Morse's program was hailed as "one of the finest on professionalism since the formation of the Chapter." ISPE Executive Director, Robert J. Newbury, preceded Mr. Morse with a short address on the "Aims and Objectives of ISPE." This double feature program highlighted the "Bosses' Night" activity of the Bloomington Area Chapter.

INTRODUCTORY MEMBERSHIP PROGRAM SURVEY

A recent survey of those members who were brought into the Society in 1960 as Introductory Members discloses some highly-significant facts. First of all, thirty-six of the member state societies are now participants. For purposes of identification, it is easier to list the states which are **not** utilizing the program:

Alaska	New Hampshire
Canal Zone	New Jersey
Georgia	Oregon
Hawaii	Puerto Rico
Idaho	South Carolina
Kentucky	South Dakota
Louisiana	Utah
Michigan	Vermont
West Virginia	

In 1961 so far, 999 new PE members were Introductory Members in 1960. This is 27 per cent of the total of new PE members to date. Also, 892 Junior Members (52 per cent of the total of new Junior Members this year) were Introductory Members last year. Thirty-four per cent of all Introductory Members were retained.

There is a considerable variation among the states in the degree of retention of Introductory Members. Among the outstanding records which were compiled, here are a few: Alabama gained 40 new PEs, or 88 per cent of those to whom they extended Introductory Membership; Illinois gained 133 (59 per cent) of the PEs and 131 (55 per cent) of the Junior Members; Mississippi—40 (73 per cent) PEs; and Texas—133 (63 per cent) PEs and 175 (70 per cent) Juniors.

From the variations in retention rates in other states, it appears obvious that a high rate is achieved only through a program at the chapter level to indoctrinate new members in the aims and goals of the Society.

Utilize NSPE's "Training For Membership"

The indoctrination procedure is best explained in **NSPE's TRAINING FOR MEMBERSHIP pamphlet.** Many hundreds of copies of this publication have been distributed at chapter officers conferences and workshops throughout the country.

If you are not familiar with this program, may I suggest that you obtain a copy of the pamphlet through NSPE. **Universal adoption** of the **TRAINING FOR MEMBERSHIP** plan will do more for our membership program than any other single item.

HUDSON ACCEPTS BRAZILIAN POST

LeVerne D. Hudson, past president of ISPE and member of the Executive Committee, is scheduled to report to Rio de Janeiro shortly after January 1, 1962 as Chief Engineer of the United States Health and Sanitation operations in Brazil. He will also serve as technical consultant to the Brazilian government to stimulate public water supply development throughout the country. The latter phase of his activities will be integrated with the technical engineering personnel of the local government and with other engineering interests operating in the country.

L. D. Hudson

Hudson's new activity will mean the termination, at least for the present, of his service as a member of the ISPE Board of Direction since 1955. As immediate past president of the Society he has been a member of the 1961-62 Executive Committee. He has been Chairman of the 1961-62 Honors and Awards Committee and has also been active in the Capital Chapter.

Scheduling on Hudson's assignment requires about five weeks of orientation in Washington, D. C. after which he expects to join his wife, Eleanor, and daughters, Mary Jane and Betsy, for the trip to Rio.

The group through which he will operate is the "Agency for International Development" (AID) branch of the United States Department of State.

Gym Roof (cont'd from p. 10)

placed without the use of a top form.

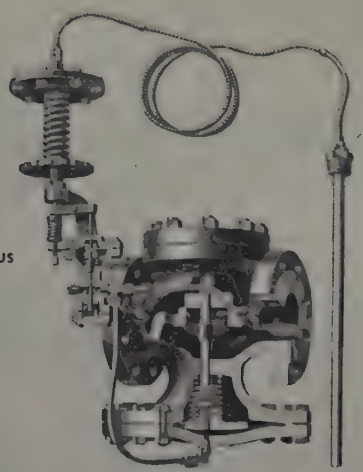
Posttensioning was used, and a strength of 4000 psi required of the concrete within four days after placement. Except for the two outside bays, each inclined web was equipped with six tendons, one containing 40 wires and the others 28 wires each. The wires, of high tensile steel, were ¼ in. in diameter. The Swiss BBRV posttensioning system was used, and because of the length of the span, alternate tendons were tensioned from opposite ends to equalize the pressure. Each wire received an initial stress of 168,000 psi.

The stressing caused an upward deflection of .9 in. at the span center line and an inward movement of the bottom flange of .4 in. at each end. Neoprene pads between folded plate and girder accommodated this movement.

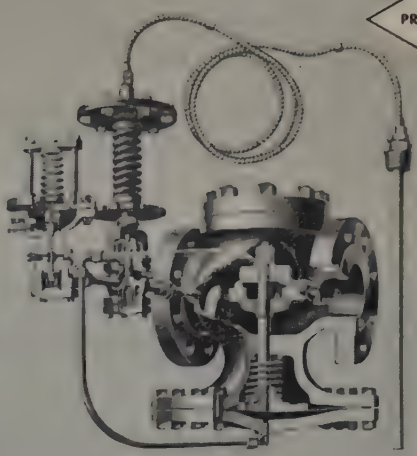
The gymnasium was designed by the architectural firm of Miller, Vrydagh & Miller of Terre Haute. Homer Howe is the Structural Engineer, and General Contractor the J. L. Simmons Company of Indianapolis.

How to Select Automatic Regulating Valves For Temperature Control

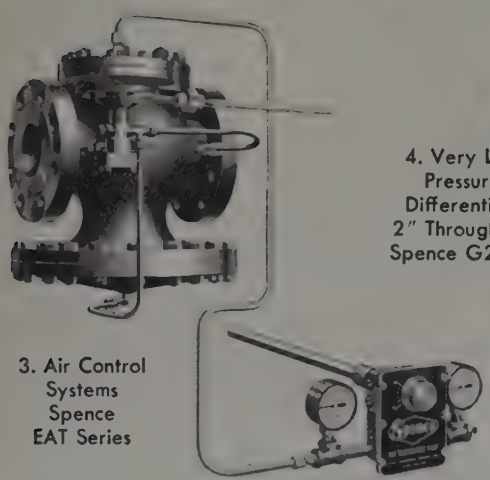
THE MOST COMPLETE LINE OF PRESSURE AND TEMPERATURE REGULATORS IN THE WORLD



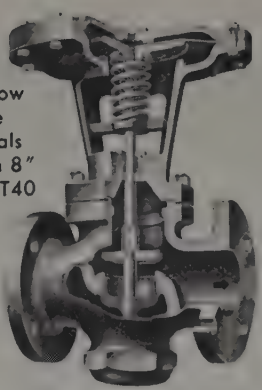
1. Instantaneous Heaters Spence ET124 Series



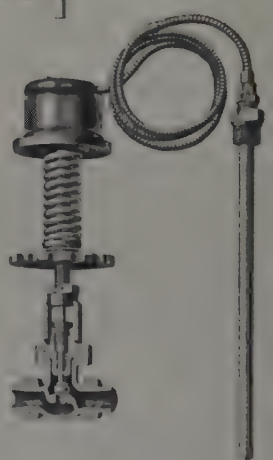
2. Storage Heaters Spence ET14D



3. Air Control Systems Spence EAT Series



4. Very Low Pressure Differentials 2″ Through 8″ Spence G2T40



5. Very Low Pressure Differentials Up Through 2″ Valves Spence Direct Acting T2

During the past year, our field representatives have reported many cases of improperly, and uneconomically, applied temperature regulators. To help you avoid some of these costly mistakes, here are a few tips on selecting the most effective and economical temperature regulating valves for your applications.

1. Instantaneous heaters require a special action for close temperature control and freedom from hunting. In the Spence ET124 series, steam pressure is modulated according to temperature (demand) and is automatically regulated at any pressure established by the demand.
2. Storage heaters, on the other hand, are more economically controlled by the Spence ET14D, which includes a simple temperature-actuated pilot that opens and closes the main valve to maintain a constant temperature.
3. Air control systems can now have a ±5°F control accuracy under wide and instantaneous load swings with the Spence EAT regulator. Engineers report savings of up to 50% in installed costs with this recently developed Spence cascade system when it has been used in place of conventional instrumentation.
4. For the combination of very low pressure differentials and air or water control, Spence recommends Type G2T40. This single seated pilot operated valve provides fast, positive response in 2″ through 8″ valves. Double seat Type G22 is also available in 10″ through 12″.
5. When very low pressure differential is encountered with valves of 2″ or less, the Spence direct operated T2 is recommended. The sensitive vapor tension thermostat responds quickly to small changes in bulb temperature for continuous, accurate control.

In this brief description of industrial process and heating temperature control, we have given a few important tips in proper regulator selection. If you would like more detailed information on these control applications, write for the new Spence Temperature Control Bulletin IV 1014. SE-150

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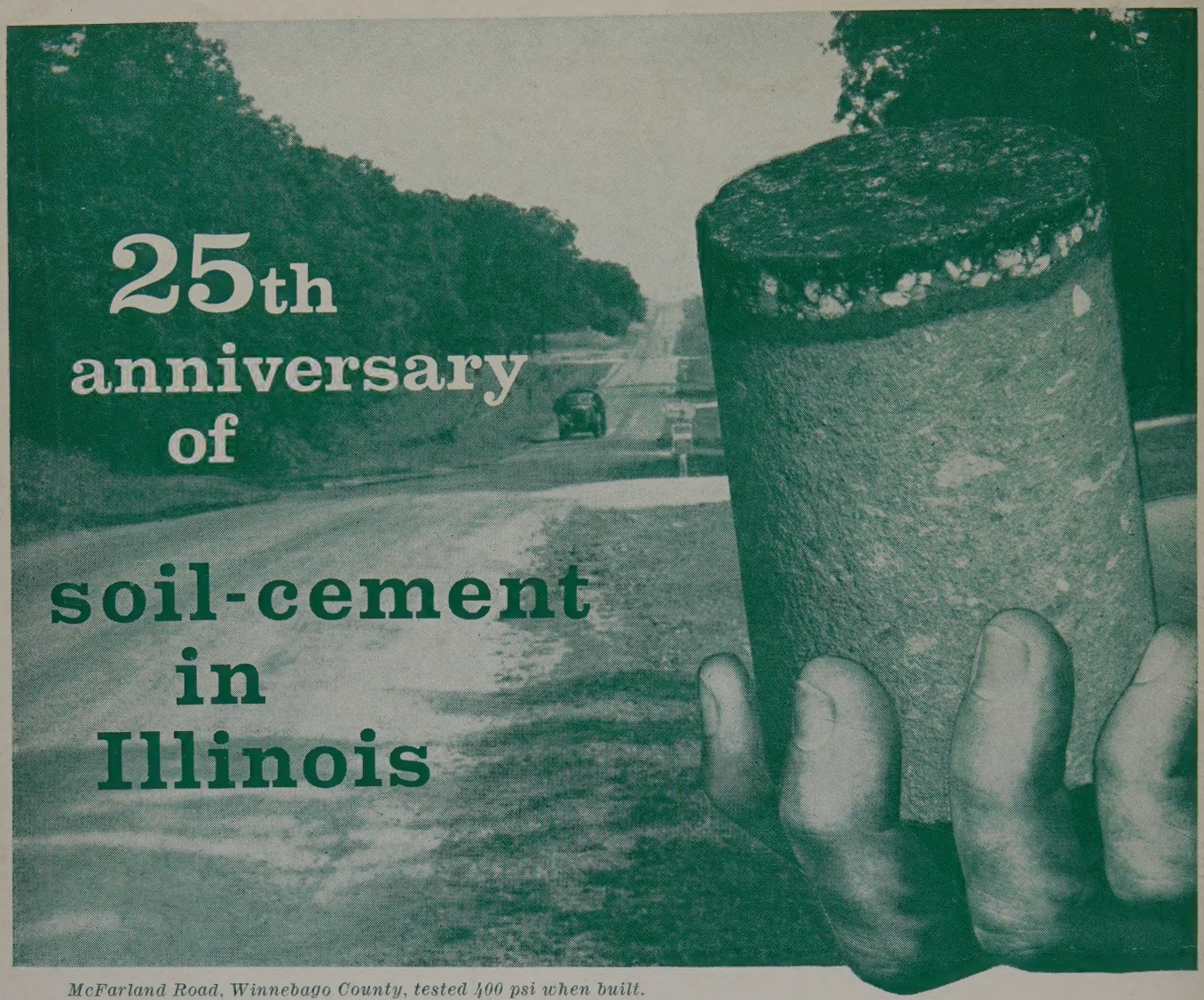

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